

**PATENT**

Atty Docket No.: 10006288-1

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FEB 21 2006

**In The U.S. Patent and Trademark Office****In Re the Application of:****Inventor(s):** Qian Lin**Confirmation No.:** 5006**Serial No.:** 10/074,179**Examiner:** Aung Soe Moe**Filed:** February 12, 2002**Group Art Unit:** 2685**Title:** METHOD AND SYSTEM FOR ASSESSING THE PHOTO QUALITY OF  
A CAPTURED IMAGE INA DIGITAL STILL CAMERA**MAIL STOP APPEAL BRIEF-PATENTS**

Commissioner for Patents

P.O. Box 1450

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29 sheets of Appeal Brief including Appendices.

Respectfully submitted,

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February 21, 2006



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IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

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Inventor(s): Qian Lin

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IMAGE IN A DIGITAL STILL CAMERA

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Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on Nov. 25, 2005.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

( ) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

( ) one month	\$120.00
( ) two months	\$450.00
( ) three months	\$1020.00
( ) four months	\$1590.00

( ) The extension fee has already been filled in this application.

(X) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$500.00. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Respectfully submitted,

Qian Lin

By

  
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Number of pages: 32

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Respectfully submitted,

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HPNO.: 10006288-1

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>Inventor(s):</b>	Qian Lin	<b>Confirmation No.:</b>	5006
<b>Serial No.:</b>	10/074,179	<b>Examiner:</b>	Aung Soe Moe
<b>Filed:</b>	February 12, 2002	<b>Group Art Unit:</b>	2685
<b>Title:</b>	METHOD AND SYSTEM FOR ASSESSING THE PHOTO QUALITY OF A CAPTURED IMAGE INA DIGITAL STILL CAMERA		

**MAIL STOP APPEAL BRIEF-PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

Appellant respectfully submits this Appeal Brief in response to the Final Office Action mailed on August 25, 2005 and the Notice of Panel Decision from Pre-Appeal Brief Review mailed on January 20, 2006.

The present Appeal Brief is being filed within one month of the Notice of Panel Decision from Pre-Appeal Brief Review because February 20, 2006 is a federal holiday.

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App. Ser. No.: 10/074,179

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**I. INTRODUCTION****A. Real Party in Interest**

The real party in interest with respect to this appeal is the Hewlett-Packard Company, the named assignee in this application.

**B. Related Appeals and Interferences**

None.

**C. Status of Claims**

Claims 1, 2, 20, and 25 have been canceled without prejudice or disclaimer of the subject matter contained therein.

Claims 3-13, 21-24, and 26 have been allowed.

Claims 14-19 and 27 stand rejected.

Pursuant to 37 C.F.R. § 41.37, Appellant hereby appeals the Examiner's decision finally rejecting Claims 14-19 and 27 to the Board of Patent Appeals and Interferences. Therefore, Claims 14-19 and 27 of this application are at issue on this appeal.

**D. Status of Amendments**

No amendments to the claims have been made subsequent to the issuance of the final Office Action.

A copy of the claims at issue on appeal is attached as the Claims Appendix.

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**II. SUMMARY OF CLAIMED SUBJECT MATTER**

Claim 14 of the present invention is the only independent claim at issue in this appeal.

Claim 14 pertains to a method for assessing the photo quality of a captured image in a digital camera (20). The steps outlined in Claim 14 are depicted and described with respect to Figures 7 and 13.

In the method of Claim 14, the photo quality of a captured image is checked, in-camera, to determine if the photo quality is acceptable. This step is broadly depicted as elements 64 and 66 in Figure 7 and as elements 90-98 in Figure 13. On page 8, paragraph 28 of the *Specification*, the captured image is described as being processed "in-camera" through use of a "custom-made built-in ASIC, DSP, or general purpose processor for the purpose of objectively checking the photo quality of the processed image..." In this regard, the terms "checked, in-camera" may be defined as checking of the captured image through processes that are performed within the digital camera (20) by one or more processing devices.

Claim 14 also recites that a corresponding photo quality feedback is provided to a camera user. This step is shown in Figures 7 and 13 as the "yes" and "no" outputs to the decision boxes 66, 93, 95, and 97.

Claim 14 further recites that a face quality figure of merit for the captured image is computed and that the computed face quality figure of merit is compared to a threshold to determine if the face quality figure of merit exceeds the threshold. These steps are shown in Figure 7 as elements 64 and 66 and in Figure 13 as elements 90-98. In addition, paragraph 88 on page 15 of the *Specification* recites that the "face quality figure of merit" is computed by "the built-in ASIC or DSP or general purpose processor of digital still camera 20", which is "programmed to compute: (a) a brightness figure of merit, (b) a noise level figure of merit,



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(c) a contrast figure of merit, and (d) to check for presence/absence of red eye in the respective detected regions.”

As such, for instance, the “face quality figure of merit” may comprise any of a number of different attributes of a face detected in the captured image. In addition, the different attributes are computed by the “built-in ASIC or DSP or general purpose processor of digital still camera 20”.

**III. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Whether Claim 14 is unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 6,298,198 to Ina et al. in view of U.S. Patent No. 6,134,339 to Luo.

Whether Claims 15-18 and 27 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 6,298,198 to Ina et al. in view of U.S. Patent No. 6,134,339 to Luo and further in view of U.S. Patent Application Publication No. 2002/0191861 to Chcatle.

Whether Claim 19 is unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 6,298,198 to Ina et al. in view of U.S. Patent No. 6,134,339 to Luo and further in view of U.S. Patent No. 6,016,354 to Lin et al.

**IV. ARGUMENT**

A. Rejection of Claim 14 Under 35 U.S.C. §103(a) Over U.S. Patent No. 6,298,198 to Ina et al. in view of U.S. Patent No. 6,134,339 to Luo

1. **The Examiner's Position**

The Examiner is of the opinion that the combination of U.S. Patent No. 6,298,198 to Ina et al. (herein after “Ina et al.”) and U.S. Patent No. 6,134,339 to Luo (herein after “Luo”)

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discloses all of the features claimed in Claim 14 of the present invention and that Claim 14 is therefore unpatentable over the combined disclosures contained in Ina et al. and Luo. In setting forth this rejection, the Examiner asserts that Ina et al. discloses all of the features of Claim 14 except "a face quality computing by *comparing said computed face quality figure of merit to a threshold to determine if said face quality figure of merit exceeds said threshold* as claimed."

More particularly, the Examiner asserts that Ina et al. discloses "checking, in-camera, the photo quality of the captured image to determined[sic] if the photo quality is acceptable". In making this assertion, the Examiner points to Figures 7, 11 and 14 of Ina et al. and asserts that "the quality of the captured image is determined by the controller 100/92 located in the camera 10; see col. 7, lines 50+, col. 8, lines 25+, and col. 9, lines 5+)"

The Examiner also asserts that Figure 14 of Ina et al. discloses "providing a corresponding photo quality feedback...to a camera user". More particularly, the Examiner asserts "that the feedback image is display[sic] on the LCD 40 of the camera [is provided] so

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